ALS MEDICATION REFERENCES

ACTIVATED CHARCOAL - Adsorbent - Adsorbs toxic substances ingested into the gastrointestinal tract thus inhibiting any gastrointestinal adsorption. Use limited to BHO.
Side effects: Be aware of possible aspiration. Will color stools black although medically insignificant.
Typical Preparations: 12.5, 25 or 50gm size squeeze bottles. Some preparations contain sorbitol.
Dose: Adult: 50gms PO
Pediatric: 1gm/kg PO

ADENOSINE - Naturally occurring nucleotide present in all cells of the body- Slows conduction through the AV node and dilates coronary arteries and peripheral vessels. Adenosine has a half-life of 10 to 12 seconds and is rapidly metabolized by blood and tissues to Inosine, a crystalline nucleotide. Used as the drug of choice in treating episodes of Narrow Complex Tachycardias.
Side Effects: Transient, lasting less than a minute, and may include chest pain, shortness of breath, flushing and various dysrhythmias including transient Asystole or V-Fib. Adenosine is often referred to as a "chemical cardioversion" Give with caution to patients with an asthma history, because of a potential for bronchospasm.
Typical Preparations: 6mg/1ml Vials
Dose: Adult: 6mg rapid IV bolus to IV port closest to the patient, followed immediately by a rapid bolus of 20ml NS. If there is no change in rhythm within 2 minutes, give a 12mg IV rapid bolus followed as before with 20ml NS. May give a 3rd bolus of 12mg if there is no change in rhythm.

ALBUTEROL SULFATE - Bronchodilator- A $Beta_2$-adrenergic receptor stimulant affecting the respiratory tract in the form of bronchial smooth muscle relaxation. May be used PTC as a bronchodilator for reversible bronchospasm in patients with bronchitis, emphysema and asthma. Use limited to BHO for CHF and acute Pulmonary Edema.
Side Effects: May cause palpations, hypertension, anxiety, nausea and dizziness. Always monitor vitals and use with caution for patients with a history of cardiovascular disease or hypertension.
Note: Other sympathomimetic aerosol bronchodilators or Epinephrine should not be used concomitantly with Albuterol. Beta blocking agents and Albuterol inhibit the effect of each other.
Typical Preparations: Premixed unit dose of 2.5mg in 2.5ml NS
Dose: Adult: Use 2.5mg of Albuterol solution in small volume nebulizer over 5-15 minutes.
Pediatric: Same as adult dose.

ASPIRIN – Anti-platelet - Indicated for any patient experiencing symptoms associated with myocardial infarction or transient ischemic episode.
Side Effects: Aspirin may cause nausea, vomiting or hemorrhage as well as exacerbate pain in patients with a history of GI irritation. Aspirin should not be given to any patient with a history of GI hemorrhage, intracranial hemorrhage, major surgery within the last 1-2 weeks, history of aortic aneurysm, or previous thrombosis.
Typical Preparations: 81mg chewable tablets. 325mg tablets
Dose: Adult: 162mg (two 81mg chewable tablets)
Pediatric: Not recommended in the pre-hospital setting

ATROPINE SULFATE - Parasympathetic agent - Inhibits the effects of parasympathetic nervous system by blocking acetylcholine receptors. It increases the heart rate in certain bradycardias originating above the ventricles. In addition, Atropine is also used in the treatment of organophosphate and nerve agent poisonings.
Side Effects: The effects of Atropine are short acting. Consider TCP instead of Atropine for a documented MI, 3rd

degree wide complex AV block, and 2nd degree type II AV block
Typical Preparations: 1mg/10ml Preload syringe
ATROPINE SULFATE Cont.
Dose: Adult: Bradycardia: 0.5mg IV to max of 3mg or 0.04mg/kg.
PEA/Asystole: 1mg IV to max of 3mg or 0.04mg/kg.
All ET dosages should be given at double the IV dose, followed by 10ml NS
Organophosphate and Nerve Agent Poisoning: 2mg IV may repeat at 2mg increments if patient remains symptomatic
Pediatric: Cardiac Emergencies: Not indicated for pediatric patients under 9 years of age
Organophosphate Poisoning: 0.02mg/kg IV/IO/ET, minimum dose 0.1mg

CALCIUM CHLORIDE - Cardiotonic agent - An electrolyte necessary for myocardial contractions, it increases myocardial contractile force, and may also enhance ventricular excitability. The calcium ion is essential for coupling the electrical event with mechanical contraction. Use limited to BHO or RCF for calcium-channel-blocker toxicity (Nifedipine, Verapamil, etc.)
Side Effects: May produce severe bradycardia, arrhythmias, cardiac arrest or syncope. Will precipitate if mixed with Sodium Bicarbonate, flush IV tubing prior to and after administration. If IV site becomes infiltrated, necrosis may occur around insertion site. May precipitate Digitalis toxicity
Typical Preparations: 10ml Calcium Chloride (1Gm/10ml) Preload syringe
Dose: Adult: 8-16mg/kg (5-10ml)
Pediatric: Base Hospital order

DEXTROSE 25% & 50% - Solution of glucose in water - Immediate source of glucose rapidly utilized for cellular metabolism. Consider obtaining blood sugar in cases of altered mental status, including cardiac arrest, and seizure activity of unknown etiology.
Side Effects: May cause necrosis should it extravagate into tissue. Aspirate frequently to insure blood return.
N**ote:** A blood glucose should be obtained prior to and 20 minutes after administration of Dextrose.
Typical Preparations: 25Gm (50%) in 50ml and 2.5gm (25%) in 10ml
Dose: Adult: 50ml rapid IV/IO push. May repeat after re-checking blood sugar.
Pediatric: 0.5gm/kg of 50% Dextrose IV/IO, dilute with equal amount NS or use 25% Dextrose preparation
Infants: 0.5gm/kg of 25% Dextrose IV/IO

DIPHENHYDRAMINE – Antihistamine - Used in the treatment of anaphylaxis and allergic reactions to inhibit histamine release. Histamine release causes capillary dilation and increased capillary permeability, both of which can lead to edema formation. BHO is required for the treatment of extrapyramidal reactions at this time. Will cause marked improvement, if not total resolution of those symptoms.
Side Effects: Drowsiness, dizziness, sedation, disturbed coordination. Dry mouth, may aggravate glaucoma, and cause urinary retention. The ingestion of alcohol, narcotics, CNS depressants or other antihistamines may increase the sedative effect of Diphenhydramine
Typical Preparations: 1cc (50mg/1ml) Ampule or Vial
Dose: Adult: 50mg IM or 25mg IV slowly
Pediatric: 2mg/kg IM or 1mg/kg IV slowly

DOPAMINE - Sympathetic agonist - A naturally occurring catecholamine and a chemical precursor of norepinephrine. It acts on alpha-receptors, is dose dependent, and causes peripheral vasoconstriction. The effect on beta 1 receptors causes a positive inotropic effect on the heart, without increasing myocardial oxygen demand as much as Epinephrine. Dopamine maintains renal and mesenteric blood flow, when used in lower therapeutic doses. Used in patients with significant hypotension, when fluid replacement is unsuccessful.
Side Effects: Increased heart rate. Can worsen or induce both narrow complex and wide complex arrhythmias. Deactivated by alkaline solutions such as Sodium Bicarbonate. May cause hypotension in patients taking Dilantin. Infiltration of IV will cause localized tissue necrosis. Notify receiving facility if IV infiltrates. Do not give via IO.

Typical Preparations: 200mg/5ml: Ampule or Vial and premixed IV solution
Dose: Adult: 5-20mcg/kg/min. For the average adult 400mg of Dopamine in 250ml D5W at a rate of 30-60 microdrops/minute provides this dose range. Titrate to blood pressure and other signs of perfusion.

Pediatric: **Contraindicated** in children under 8 years of age within the ICEMA region.

EPINEPHRINE - Endogenous catecholamine - Epinephrine is an adrenergic agent with both alpha and beta receptor stimulating actions; effects include increased heart rate, contractility electrical activity, blood pressure, systemic vascular resistance and automaticity. Epinephrine may initiate electrical activity in asystole and convert fine VF to coarse VF, thereby improving chances for successful defibrillation. In addition, it is used as a smooth muscle relaxant in severe reactive airway disease to decrease bronchospasm in anaphylaxis.
Side Effects: Effects may be intensified in patients taking anti-depressants. All patients should be observed for tachy-arrhythmias. Epinephrine will precipitate if mixed with Sodium Bicarbonate.
Typical Preparations: 1ml 1:1,000 Ampule, 10ml 1:10,000 Syringe and 30ml 1:1000 Multi-dose Vial
Dose: Adult: Cardiac Arrest: 1.0mg IV/IO during 2 minute cycle of CPR after every defibrillation
Pediatric: Cardiac Arrest - 1 Day to 8 Years of Age: 0.01mg/kg IV/IO during 2 minute cycle of CPR after every defibrillation. Et dose is 10 times the IV dose, 0.1mg/kg diluted in NS to total 2-5ml
Post Resuscitative Care - 1 Day to 8 Years of Age: 0.005 mg/kg (1:10,000) IO/IV every 10 minutes to maintain adequate tissue perfusion.
Cardiac Arrest - 9 to 15 Years of Age: Same as Adult dosage
Adult: Acute Allergic Reaction and/or Bronchospasm: 0.3mg SC (1:1,000 solution) May repeat one time. Maximum total dosage 0.5mg for severe anaphylaxis
Pediatric: Acute Allergic Reaction and/or Bronchospasm: 0.01 mg/kg SC (1:1,000) up to 0.3mg SC Maximum total dosage 0.05 mg/kg for severe anaphylaxis

FUROSEMIDE - Diuretic- Lasix is a potent diuretic inhibiting sodium chloride re-absorption in the kidney. It also causes venous dilation. Used in the later stages of CHF and pulmonary edema to remove excess fluid. Use with extreme caution in patients who may have Pneumonia, as these patients may be dehydrated.
Side Effects: Dehydration and electrolyte depletion, which may lead to digitalis and/or lithium toxicity, hypokalemia, hyponatremia, hypoglycemia, hypotension, EKG changes, and chest pain.
Typical Preparations: 10mg/ml Vials.
Dose: Adult: 40-100mg IV or 2 times the daily dose. Maximum dose 100mg IV slowly. May only be given by Base Hospital order or in RCF
Pediatric: 1mg/kg IV slowly with Base Hospital order only.

GLUCAGON - Pancreatic hormone- Elevates blood glucose level by causing a breakdown of glycogen stored in the liver to glucose. Also inhibits the synthesis of glycogen from glucose. May be used IM with suspected Hypoglycemia when IV access is unobtainable. Administer with caution to patients with a history of cardiovascular or renal disease. With BHO, Glucagon may be administered to patients with history of possible esophageal foreign body aspiration
Side Effects: Nausea and vomiting. Hypersensitivity.
Typical Preparations: 1ml Ampule containing 1mg Glucagon. Use only diluent provided to make a 1mg/ml solution.
Dose: Adult: 1mg IM. The onset of action is within 5 to 20 minutes. May also be given IV.
Pediatric: 0.025mg/kg, IM. May repeat 1 time after 20 minutes, if the total of both doses does not exceed 1mg.

IPRATROPIUM BROMIDE – (ATROVENT) - Anticholinergic – Ipratropium is an anticholinergic (parasympatholytic) bronchodilator used in the treatment of respiratory emergencies. It causes broncho-dilation and dries respiratory secretions. Ipratropium acts by blocking acetylcholine receptors, inhibiting parasympathetic stimulation.
Side Effects: Can cause palpitations, anxiety, dizziness, headache, nervousness, rash, nausea, vomiting.
Typical Preparations: unit dose vial of 0.5mgs in 2.5 ml saline.

IP**RATROPIUM BROMIDE** Cont.

Dose: Adult: Use 0.5 mg of Ipratropium Bromide in a small volume nebulizer over 5-15 minutes. May be mixed with Albuterol, stable if used within one hour.
Pediatric: 1Day to 12 Months – Atrovent 0.25 mgs
1Year to Adult -- Atrovent 0.5 mgs

LIDOCAINE – Antidysrhythmic - With the changes recommended by AHA, there has been a change in how Lidocaine is used. For *sustained* V-Tach or Wide Complex Tachycardias and VF/Pulseless VT it continues to be recommended. It suppresses the automaticity of ventricular ectopic pacemakers. During a myocardial infarction, Lidocaine elevates the ventricular fibrillation threshold. A Lidocaine bolus should be followed by a 2-4mg/min infusion to maintain therapeutic blood levels. Lidocaine is also effective when used at 1.5mg/kg as rapid IV bolus prior to intubation of a head injured patient. In this instance, it numbs the oropharynx for approx 1 minute, thereby decreasing the chance of increasing the ICP during intubation.

Side Effects: Contraindicated in 2nd degree Type II, and 3rd degree AV blocks. Lidocaine may slow or stop the conduction of electrical impulses from the atria and ventricles. Lidocaine should never be given in conjunction with premature ventricular contractions and Bradycardia. In these cases, the underlying rhythm should be treated first. CNS depression may occur at high doses. In addition, use decreased dosages for elderly patients and those with impaired liver and renal function. Symptoms of CNS depression may include: decreased level of consciousness, irritability, confusion, muscle twitching, seizures, coma and finally, death.

Typical Preparations: 5ml Preload syringes (100mg/5ml)
250ml NS with IGM Lidocaine premixed.

Dose: Adult: VF/Pulseless VT and Stable sustained VT or Wide Complex Tach: 1.5mg/kg slow IV/IO after two cycles of CPR. May repeat at 0.75mg/kg IV/IO every 5 minutes to maximum of 3mg/kg
ET dosage is 2 times the IV/IO dosage diluted in NS to total 5 -10ml. With documented conversion from VT/VF may initiate infusion of 2mg/min
Pediatric: Cardiac arrest - One Day to 8 Years of Age: VF/Pulseless VT: 1.0mg/kg IV/ET/IO after two cycles of CPR. May repeat at 0.5mg/kg after five minutes to a maximum of 3mg/kg.
Cardiac Arrest - 9 to 15 Years of Age: Same as Adult dosage

MAGNESIUM SULFATE - Magnesium supplement and anticonvulsant – As an essential element in numerous biochemical reactions in the body it is responsible for neurotransmission and muscular excitability. Low levels of magnesium may cause refractory ventricular fibrillation and impede the replenishment of intracellular potassium. Dysrhythmias associated with low magnesium include: Torsades de pointes, refractory VF/VT, PEA and Asystole. It also acts as a peripheral vasodilator, and resolves seizures associated with toxemia of pregnancy (eclampsia).

Side Effects: May cause drowsiness, respiratory depression, hypotension and circulatory collapse. Use with caution in patients with decreased renal function, those undergoing dialysis, taking cardiac glycosides, history of hypocalcemia, and individuals in 3rd degree heart block. **NOTE-** An overdose of Magnesium may cause respiratory depression and heart block. A 10% Calcium Chloride bolus of 500mg-1gm should be given with Base Hospital order.

Typical Preparations: 10gm Vial of a 10% solution

Dose: Adult: Seizure activity in the toxemic patient: 4gms IV/IO diluted with 20ml NS given **slowly** over 3 - 4 minutes PTC. May initiate an infusion of 2gms in 100ml NS at 0.5ml/min. (30ml/hr), with an extended transport time in RCF or with a BHO.
Stable VT or Wide Complex Tachycardia – Torsades de Pointes: 2gm in 100ml NS infuse over 5 minutes.
Pediatric: Not recommended in the pre-hospital setting

MIDAZOLAM - Sedative/ hypnotic – Midazolam is a short acting benzodiazepine with amnesic properties. In the pre-hospital setting, benzodiazepines are primarily used as a skeletal muscle relaxant during seizure activity, and secondarily for its amnesic properties, during Cardioversion and TCP. Benzodiazepines are absorbed from the GI tract and metabolized in the liver. Onset of action when administered IV is 1 to 5 minutes and less than 15 minutes when administered intramuscularly. Like other benzodiazepines, it has no effect on pain.
Side Effects: Can cause laryngospasm, bronchospasm, dyspnea, respiratory depression and arrest, bradycardia, tachycardia, PVCs and retching. Drug should not be given to patients with a history of narrow-angle glaucoma, in shock, with signs of inadequate tissue perfusion, alcoholic coma, or with known sensitivity to the drug, or allergies to cherries (for oral preparations only). ALWAYS monitor and document respirations when giving this drug.
Typical Preparations- 2mg/2ml, 10mg/2ml and 5mg/5ml vials
Dose: Adult: Cardioversion and TCP: 1 to 2mg Slow IV push. May be given PTC to awake patients.
Seizures: 5-10mg IM or 2.5-5mg IV/IO
Pediatric: Seizures: 0.2mg/kg IM with maximum IM dose 10mg or
0.1mg/kg IV/IO with maximum IV/IO dose 2.5-5mg

MORPHINE SULFATE - Narcotic analgesic – Morphine Sulfate is a potent CNS depressant used with patients experiencing pain thereby reducing discomfort, apprehension and fear. It also has certain hemodynamic properties such as decreased systemic vascular resistance that can lead to decreased myocardial oxygen demands. Used for the severe pain associated with myocardial ischemia and/or myocardial infarct not relieved by Nitroglycerin. Used for severe pain associated with isolated extremity fractures.
Side Effects: Respiratory depression, hypotension. nausea & vomiting. Not recommended for use in the initial acute stages of CHF and PE because of the potential for respiratory compromise. Do not use in situations where the close monitoring of mental status is required (as in, head injury, multiple system trauma, hypovolemia, abdominal pain and chest trauma.) **Note:** Narcotic effects are reversible with Naloxone (Narcan.) Hypotensive effects are NOT reversible.
Typical Preparations: 1ml Ampule (10mg/ml)
MORPHINE SULFATE Cont.
Dose: Adult: Suspected Acute MI: 2-4mg IV in increments titrated to effect, dosage not to exceed 10mg prior to Base Hospital contact. May give additional doses during RCF.
Adult Trauma: 2mg increments up to 20mg IV for Extremity Trauma and Suspected Hip Fracture
2-4mg increments titrated up to 30mg IV for Burns
Pediatric: Pediatric Trauma: 0.1-0.2mg/kg IV not to exceed 2mg increments up to 5mg IV or 10mg IM in isolated extremity trauma or 20mg total for Burns

NALOXONE - Narcotic antagonist - Naloxone reverses the effects of narcotics or synthetic narcotic agents by binding with central nervous system depressants. Examples of these agents are: Heroin, Methadone, Propoxyphene (Darvon), Pentazocine (Talwin), Meperidine, Morphine, Diphenoxylate (Lomotil), Codeine, Oxycodone (Percodan) and various diarrhea and cough medicines containing any of these medications.
Side Effects: In the absence of narcotics, Naloxone has no perceivable effects. Rapid reversal of narcotic overdose may lead to combative behavior. Use with caution in patients with pre-existing Cardiovascular disorders.
Typical Preparations: 2cc Ampule (1mg/1ml.) 10ml Vial (4mg/10ml.) 1ml Ampule/Vial (0.4mg/1ml)
Dose: Adult: 1.0-2.0mg IV, IM
Pediatric: 0.1mg/kg IV, or ET as initial dose.

NITROGLYCERINE - Smooth muscle relaxant - Rapid, direct vasodilatation effect on both arterial and venous vessels causing venous pooling of blood. Also causes vasodilation of coronary arteries, thereby increasing perfusion of ischemic myocardium tissue. This action reduces myocardial work and oxygen consumption thereby leading to pain relief. In CHF and Pulmonary Edema, Nitroglycerine is used to decrease pre-load and after-load, improving cardiac output. Nitroglycerin is contraindicated with signs of inadequate tissue perfusion, suspected RVI as indicated by a 12-leadEKG and with recent use of any sexual enhancement medications.
Side Effects: Hypotension, headache and/or flushing
Typical Preparations: Spray 0.4mg metered dose. Bottle 1/150gr = 0.4mg per tablet

Dose: Adult: Suspected Acute MI: 1 metered dose sprayed onto the tongue, or 1 tablet sublingually. May repeat with signs/symptoms of adequate perfusion. Consider MS for pain management when NTG is contraindicated (recent use of any sexual enhancement medication)
CHF/Pulmonary Edema: May repeat with signs/symptoms of continued adequate tissue perfusion
Pediatric: Not used in children

OXYTOCIN - Posterior pituitary hormone - Causes the contraction of uterine smooth muscle and plays a role in lactation. Paramedics may monitor this medication during an inter-facility transport.
Side Effects: Hypertension, cardiac dysrhythmias, and anaphylaxis have been reported as potential side effects. Therefore, it is important to monitor vital signs including BP, cardiac monitor, respiratory status and uterine tone. In addition, Oxytocin in excessive doses can cause uterine rupture. **NOTE:** Oxytocin is an optional ALS medication.
Typical Preparations: 10 units/1ml Ampule
Dose: Adult: 10-20 units in 1000ml NS. Titrate to sustain uterine contractions and control uterine atony.

PHENYLEPHRINE HYDROCHLORIDE - Direct-acting adrenergic agent, vasoconstrictor - A synthetic sympathomimetic compound structurally similar to Epinephrine and Ephedrine. Used topically it acts as a potent local vasoconstrictor and may reduce the chance of muscosal hemorrhage during nasal intubation.
Side Effects: Although rare, systemic absorption may lead to alpha-adrenergic effects such as a transient rise in blood pressure, and/or pulse rate. Caution should be used in patients with a known history of diabetes, and/or hypertension. In addition, it may increase the effects of any other prescribed vasopressor agents.
Typical Preparations: 0.5% solution
Dose: Adult: 1metered dose in the affected nostril, wait 30 seconds prior to attempt at naso-tracheal intubation. May be repeated once without Base Hospital contact.

PROCAINAMIDE – Antidysrhythmic – Procainamide is used in the treatment of ventricular dysrhythmias by suppressing the automaticity of ectopic pacemakers, and slowing interventricular conduction through the Bundle of His.
Side Effects: Hypotension, nausea, vomiting, confusion and seizures are some side effects. Procainamide should be discontinued with signs of inadequate tissue perfusion, QRS segment widening by 50% of its original width, or a total dose of 17mg/kg has been given. Patients presenting with pre-existing QT prolongation and/or Torsade de Pointes should not receive Procainamide. Use caution in administrating Procainamide to patients who may be experiencing an acute MI, digitalis toxicity or renal failure. Hypotension may be increased if given with antihypertensive medications, and neurological toxicity may be increased if administered concurrently with Lidocaine.
Typical Preparations: 1gm/10ml Vial.
Dose: Adult: Mix 1gm/250ml NS**. Give 20mg (5ml) slowly over 1 minute via IV push.** Repeat until the dyshrythmia is suppressed **or** to a maximum of 17mg/kg, QRS widens by 50%, or signs of inadequate tissue perfusion develops
May initiate an infusion of 1-4mg/min if rhythm converts with BHO.
Pediatric: Not indicated in the pre-hospital setting.

SODIUM BICARBONATE - Alkalizing agent – Sodium bicarbonate combines with strong acids to form a weak volatile acid, which then will degrade to carbon dioxide and water. The end products are removed via the kidneys or lungs. Sodium Bicarbonate is used primarily late in cardiac arrest, after ventilation has been adequately addressed with BHO. Sodium Bicarbonate is also used in the treatment of Tricyclic antidepressant overdose.
Side Effects: Can cause metabolic alkalosis following overzealous administration. Do **not** mix Dopamine with Sodium Bicarbonate. A precipitate is formed in the presence of Calcium Chloride and NaHCO3.
Typical Preparations: 50ml syringe (1mEq/1ml)
Dose: Adult: PEA and Asystole: 1mEq/kg IV. Given only with a BHO for patient with known hyperkalemia, or in RCF with an overdose of a Tricyclic antidepressant.
Pediatric: Use restricted to direct Base Hospital Physician order *only*.

VERAPAMIL - Slow channel calcium blocker - Slows AV conduction and prolongs the refractoriness of the AV node. Verapamil inhibits tachycardias caused by a re-entry mechanism (PSVT). It decreases the rapid ventricular response seen in Atrial Flutter and Atrial Fibrillation, decreases myocardial oxygen demand, and causes coronary artery and peripheral venous vasodilation. However, Verapamil is considered a second line drug to Adenosine in the treatment of narrow-complex tachycardia.

Side Effects: Systemic hypotension is the main side effect of Verapamil. In addition, it should not be administered to any patient exhibiting symptoms of severe hypotension, cardiogenic shock, pulmonary edema, patients in ventricular tachycardia, receiving intravenous beta blockers, or diagnosed with Wolff-Parkinson-White syndrome.

Typical Preparations- 2ml Ampoules (2.5mg/ml)

Dose: Adult: 5mg IV over 3 minutes, repeat dose 10mg IV after 15 minutes. May be given in RCF for PSVT, or upon Base Hospital order.

Pediatric: Not indicated in pre-hospital setting at this time.

APPROVED: ON FILE

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ICEMA Medical Director Date

Sm/07